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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/954,835 | 09/18/2001 | Monica A. Jacinto | 7784-000255 | 8137 |

27572 7590 02/05/2003

HARNESS, DICKEY & PIERCE, P.L.C.
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EXAMINER

WESSMAN, ANDREW E

| ART UNIT | PAPER NUMBER |
|----------|--------------|
|----------|--------------|

1742

5

DATE MAILED: 02/05/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/954,835

Applicant(s)

JACINTO ET AL.

Examiner

Andrew E Wessman

Art Unit

1742

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 December 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) 23-25 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. Claims 1-22 remain for examination. Claims 23-25 have been added. Claims 1, 4, 7, 11, 14, 18, and 20 have been amended.
2. In view of the amendment to the claims, the objections to the claims and the rejection under 35 U.S.C. 112, 2nd paragraph are withdrawn.

Election/Restrictions

3. Newly submitted claims 23-25 are directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: The newly submitted claims are directed towards a rocket engine component, whereas the originally presented claims are directed towards a burn resistant alloy. These two invention are independent and distinct and are given different classification.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 23-25 are withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 1-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miller et al. (U.S. Patent No. 5,120,373).

Miller et al. teaches the invention as claimed. Miller et al. teaches (col. 2, lines 5-23, Table 1) a nickel based alloy comprising 12-20 wt% chromium, 10-20 wt% cobalt, 3-7 wt% titanium, and 1.2-3.5 wt% aluminum. Miller et al. further teaches the alloy can contain up to 0.25 wt% carbon, up to 1.0 wt% manganese, up to 0.8 wt% silicon, up to 0.07 wt% zirconium, and 0.0005-0.004 wt% boron. Using minimum and maximum values of the additional elements in the disclosure, the nickel content of Miller et al. can range from less than 40 wt% to approximately 72 wt%. Miller et al. also teaches (col. 1, lines 65-68) that the alloy has high strength, and provides values of the strength in figure 3. With regards to the features of claim 1, wherein the alloy of the claimed invention has less than 12 percent chromium, and also with regards to the features of claim 11, wherein the alloy has at least 72 percent nickel, while the values of the elements in the claimed invention and the prior art do not overlap, a prima facie case of obviousness exists where the claimed ranges do not overlap but are close enough that one skilled in the art would have expected them to have the same properties. Titanium Metals Corp. of America v. Banner, 778 F.2d 775, 227 USPQ 773 (Fed. Cir. 1985), See MPEP 2144.05. In this case "less than about 12 percent" as claimed in claim 1 is substantially the same as 12 percent, and so the claimed invention is not patentably distinct from Miller et al., and with regards to the at least 72 percent nickel of claim 11, this is substantially the same as the 71.78 percent nickel of Miller et al.

Miller et al. does not teach that the alloy is burn resistant. The claimed invention does not claim any quantitative data about burn resistance, and all materials have some measure of burn resistance, so this is given little patentable weight. Also, because the alloy of Miller et al. has the same composition as that of the claimed invention, the properties of the alloys must be the same. Applicant has not claimed any features aside from the composition of the alloy, and so any processing that may be performed on the composition to impart different properties to the alloy cannot be used as a basis for a determination of patentability. Also, it has been held that a composition and its properties are inseparable. Therefore, if the prior art teaches the identical chemical structure, the properties applicant teaches and/or claims are necessarily present. In re Spada, 911 F.2d 705, 709, 15 USPQ2d 1655 (Fed. Cir. 1990). In this case, because the claimed invention and Miller et al. have identical compositions, the properties of those compositions must be the same. Also see Titanium Metals Corp. v. Banner, 778 F.2d 775, 227 USPQ 773 (Fed. Cir. 1985), MPEP 2144.05, wherein it is held that because a composition of the prior art is identical to the claimed invention, it is immaterial what properties are claimed because those properties would necessarily be present.

Miller et al. does not teach specific pressure threshold values as claimed in claims 18 and 23 for the alloys. Miller et al., however, teaches (see abstract) alloys of a substantially identical composition as the claimed invention, and shows (Fig. 3) that such alloys have a tensile strength of over 160,000 psi. While there is no mention in either reference of a specific value of threshold pressure, because Miller et al. teaches

alloys with the same composition as the claimed invention, and because Miller et al. teaches that the strength properties of the prior art alloys are the same as the claimed invention, it would be expected by one of ordinary skill in the art that the threshold pressure of the alloys would also be the same. Also, when the PTO shows a sound basis for believing that the products of the applicant and the prior art are the same, the applicant has the burden of showing they are not. In re Spada, 911 F.2d 705, 709, 15 USPQ2d 1655, 1658 (Fed. Cir. 1990), MPEP 2112.01. In this case, applicant is invited to provide evidence that the claimed invention is patentably distinct from the prior art.

Response to Arguments

6. Applicant's arguments with respect to claims 1-22 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew E Wessman whose telephone number is (703)305-3163. The examiner can normally be reached on Monday through Friday, 8:00am to 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy King can be reached on (703)308-1146. The fax phone numbers for the organization where this application or proceeding is assigned are (703)872-9310 for regular communications and (703)872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)308-0661.

AEW
February 3, 2003


ROY KING
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1700